

AMENDMENTS TO THE CLAIMS

Claims 1-17 (Canceled)

Claim 18 (Currently Amended) A reproduction apparatus, comprising:

a reproducing means for reading information stored in a recording-record medium and reproducing ~~this~~ the information;

a skip-operation accepting means for arbitrarily accepting ~~either one of an~~ an instruction for a forward reproduction-position skip ~~or~~ and an instruction for a backward reproduction-position skip;

a skip-time determining means for making a skip time for ~~either one of the forward reproduction-position skip and the backward reproduction-position skip longer than [[a]] the skip time for another of the forward reproduction-position skip and the backward reproduction-position skip the other~~, and determining [[a]] the skip time for one of the forward reproduction-position skip and the backward reproduction-position skip based on the one ~~either~~ of the instruction for the forward reproduction-position skip and the instruction for the backward reproduction-position skip ~~which is accepted by the skip-operation accepting means; and~~

a controlling means for, when ~~if~~ the skip-operation accepting means accepts one of the ~~either~~ instruction for the forward reproduction-position skip ~~or~~ and the instruction for the backward reproduction-position skip during a reproduction ~~in~~ by the reproducing means, ~~then~~ stopping the reproduction by ~~in~~ the reproducing means, moving ~~the~~ a reading position in, from which the reproducing means reads the information from the ~~record~~ recording medium, by the skip time determined, for the one of the forward reproduction-position skip and the backward

reproduction-position skip, by the skip-time determining means, and resuming the reproduction after the ~~moving-movement~~ of the reading position is completed;

a forward skip-operation elapse-time clocking means for clocking an elapsed time that has elapsed since a last instruction has been accepted for the forward reproduction-position skip;
and

a backward-skip deciding means for deciding whether or not the elapsed time clocked by the forward skip-operation elapse-time clocking means has exceeded a predetermined time, when the skip-operation accepting means accepts the instruction for the backward reproduction-position skip,

wherein, when the backward-skip deciding means decides that the elapsed time exceeds the predetermined time, the skip-time determining means determines a predetermined first skip time, and

wherein, when the backward-skip deciding means decides that the elapsed time does not exceed the predetermined time, the skip-time determining means determines a second skip time that is shorter than the first skip time.

Claim 19 (Currently Amended) The reproduction apparatus according to claim 18, wherein,
when characterized in that if the skip-operation accepting means accepts either the one of the
instruction for the forward reproduction-position skip or and the instruction for the backward
reproduction-position skip during a temporary stop-in by the reproducing means, then the
controlling means moves the reading position-in from which the reproducing means reads the
information from the record recording medium by the skip time determined, for the one of the
forward reproduction-position skip and the backward reproduction-position skip, by the skip-

time determining means, and reproduces only ~~the~~ first information ~~in~~ from the reading position after the moving of the reading position ~~movement~~.

Claim 20 (Currently Amended) The reproduction apparatus according to claim 18, characterized in that:

wherein the reproduction apparatus further includes: [[,]]

_____ a forward skip-time storing means for storing the skip time for the forward reproduction-position skip ~~time~~ in advance; ~~and~~; and

_____ a backward skip-time storing means for storing the skip time for the backward reproduction-position skip ~~time~~ in advance; ~~and~~

wherein, when ~~if~~ the skip-operation accepting means accepts the instruction for the forward reproduction-position skip ~~instruction~~, the skip-time determining means chooses the skip time for the forward reproduction-position skip ~~time~~ stored in the forward skip-time storing means, and

wherein, when ~~if~~ the skip-operation accepting means accepts the instruction for the backward reproduction-position skip ~~instruction~~, the skip-time determining means chooses the skip time for the backward reproduction-position skip ~~time~~ stored in the backward skip-time storing means.

Claim 21 (Currently Amended) The reproduction apparatus according to claim 20, characterized in that wherein the forward skip-time storing means stores₁ in advance₁ the skip time for the forward reproduction-position skip₁ ~~time~~ which is a greater value than the skip time

for the backward reproduction-position skip-time stored₁ in advance₁ in the backward skip-time storing means.

Claim 22 (Currently Amended) The reproduction apparatus according to claim 20, wherein ~~characterized in that~~ the backward skip-time storing means stores₁ in advance₁ the skip time for the backward reproduction-position skip-time which is a greater value than the skip time for the forward reproduction-position skip-time stored₁ in advance₁ in the forward skip-time storing means.

Claim 23 (Cancelled)

Claim 24 (Currently Amended) The reproduction apparatus according to claim 18, ~~claim 23, characterized in that:~~

wherein the reproduction apparatus further includes[[,]]:

_____ a first skip-time storing means for storing the predetermined first skip time in advance₁, ~~and;~~ and

_____ a second skip-time storing means for storing₁ in advance₁ the second skip time that is shorter than the first skip time; ~~and,~~

~~the skip-time determining means,~~

wherein, when ~~if~~ the skip-operation accepting means accepts the instruction for the backward reproduction-position skip-instruction and if when ~~the forward skip-operation elapse~~ elapsed time clocked by the forward skip-operation elapse-time clocking means exceeds ~~has exceeded~~ the predetermined time, the skip-time determining means ~~then~~ chooses the first skip

time stored in advance in the first skip-time storing means as the skip time for the backward reproduction-position skip-time, and

wherein, when~~if~~ the skip-operation accepting means accepts the instruction for the backward reproduction-position skip-instruction and if when ~~the forward skip-operation elapse elapsed~~ time clocked by the forward skip-operation elapse-time clocking means ~~has~~ does not ~~exceed-exceeded~~ the predetermined time, the skip-time determining means ~~then~~ chooses the second skip time stored in advance in the second skip-time storing means as the skip time for the backward reproduction-position skip-time.

Claim 25 (Currently Amended) The reproduction apparatus according to claim 18, characterized in that:

wherein the reproduction apparatus further includes: [[,]]

_____ a backward skip-operation elapse-time clocking means for clocking ~~the a~~ backward elapsed time that has elapsed since a ~~which elapses after the~~ last instruction has been accepted ~~is given~~ for the backward reproduction-position skip, ~~and;~~ and

_____ a forward-skip deciding means for deciding whether or not the backward elapsed elapse time clocked by the backward skip-operation elapse-time clocking means has exceeded [[a]] the predetermined time, when ~~if~~ the skip-operation accepting means accepts the instruction for the forward reproduction-position skip-instruction; and,

wherein, when~~if~~ the forward-skip deciding means decides that the backward elapsed time exceeds the predetermined time ~~has elapsed~~, the skip-time determining means determines [[a]] the predetermined first skip time, and

~~wherein, when~~ if the forward-skip deciding means decides that the backward elapsed time does not exceed the predetermined time ~~had not elapsed~~, the skip-time determining means determines ~~[[a]]~~ the second skip time that is shorter than the first skip time.

Claim 26 (Currently Amended) The reproduction apparatus according to claim 25, characterized in that:

wherein the reproduction apparatus further includes: ~~[[,]]~~
_____ a first skip-time storing means for storing the predetermined first skip time in advance, ~~and;~~ and

_____ a second skip-time storing means for storing, in advance, the second skip time that is shorter than the first skip time; ~~and,~~

~~the skip-time determining means,~~

wherein, when if the skip-operation accepting means accepts the instruction for the forward reproduction-position skip instruction and ~~if~~ when the backward elapsed skip-operation ~~elapsed~~ time clocked by the backward skip-operation elapse-time clocking means ~~exceeds~~ has exceeded the predetermined time, the skip-time determining means then chooses the first skip time stored in advance in the first skip-time storing means as the skip time for the forward reproduction-position skip ~~time~~, and

wherein, when if the skip-operation accepting means accepts the instruction for the forward reproduction-position skip instruction and ~~if~~ when the backward elapsed skip-operation ~~elapsed~~ time clocked by the backward skip-operation elapse-time clocking means ~~has~~ does not exceed ~~exceeded~~ the predetermined time, the skip-time determining means then chooses the

second skip time stored in advance in the second skip-time storing means as the skip time for the forward reproduction-position skip time.

Claim 27 (Cancelled)

Claim 28 (Cancelled)

Claim 29 (Currently Amended) The reproduction apparatus according to claim 18, claim 28, characterized in that:

wherein the reproduction apparatus further includes: [[,]]

_____ a skip-direction storing means for storing ~~the~~ a skip direction last accepted ~~last~~ by the skip-operation accepting means, ~~and;~~ and

_____ a skip-number storing means for storing ~~the~~ a number of times that at which the skip-time determining means has ~~determines the second skip time~~ repeatedly determined the second skip time; ~~and,~~

~~the skip-time determining means;~~

wherein, the skip-time determining means determines the second skip time, when ~~if~~ the backward-skip deciding means decides that the elapsed time does not exceed the predetermined time ~~had not elapsed~~ and if when the instruction accepted by the skip-operation accepting means indicates ~~the~~ a skip direction that is opposite to the direction to the skip direction stored in the skip-direction storing means,

wherein the skip-time determining means determines the second skip time, when ~~if~~ the backward-skip deciding means decides that the elapsed time does not exceed the predetermined

~~time had not elapsed, when if~~ the instruction accepted by the skip-operation accepting means indicates ~~the~~ a same skip direction as the skip direction stored in the skip-direction storing means and ~~when if~~ the number of times stored in the skip-number storing means ~~at which the second skip time is repeatedly determined~~ has not reached a predetermined number of times,

wherein the skip-time determining means determines the first skip time, ~~when if~~ the backward-skip deciding means decides that the elapsed time exceeds the predetermined time ~~had elapsed, and~~

wherein the skip-time determining means determines the first skip time, ~~when if~~ the backward-skip deciding means decides that the elapsed time does not exceed the predetermined time ~~had not elapsed, when if~~ the instruction accepted by the skip-operation accepting means indicates the same skip direction as the skip direction stored in the skip-direction storing means and ~~when if~~ the number of times stored in the skip-number storing means ~~at which the second skip time is repeatedly determined~~ has reached ~~[[a]]~~ the predetermined number of times.

Claim 30 (Currently Amended) The reproduction apparatus according to claim 18, claim 23, characterized in that:

wherein a reproduction-time clocking means is further provided for clocking ~~the~~ a reproduction time from ~~the~~ a last skip-operation completion time to ~~the~~ a next skip-operation start time; ~~and, and~~

wherein, when if the next skip operation is the forward reproduction-position skip, the skip-time determining means determines, as the skip time for the one of the forward reproduction-position skip and the backward reproduction-position skip, the a time which is

obtained by subtracting the reproduction time clocked by the reproduction-time clocking means from ~~either skip time~~ one of the first skip time and the second skip time.

Claim 31 (Currently Amended) The reproduction apparatus according to claim 25, characterized in that:

wherein a reproduction-time clocking means is further provided for clocking ~~the~~ a reproduction time from ~~the~~ a last skip-operation completion time to ~~the~~ a next skip-operation start time; ~~and,~~ and

wherein, when ~~if~~ the next skip operation is the forward reproduction-position skip, the skip-time determining means determines, as the skip time for the one of the forward reproduction-position skip and the backward reproduction-position skip, ~~the~~ a time which is obtained by subtracting the reproduction time clocked by the reproduction-time clocking means from ~~either skip time~~ one of the first skip time and the second skip time.

Claim 32 (Cancelled)

Claim 33 (Currently Amended) The reproduction apparatus according to claim 18, ~~claim 23,~~ characterized in that:

wherein a reproduction-time clocking means is further provided for clocking ~~the~~ a reproduction time from ~~the~~ a last skip-operation completion time to ~~the~~ a next skip-operation start time; ~~and,~~ and

wherein, when ~~if~~ the next skip operation is the backward reproduction-position skip, the skip-time determining means determines, as the skip time for the one of the forward

~~reproduction-position skip and the backward reproduction-position skip, the~~ a time which is obtained by adding the reproduction time clocked by the reproduction-time clocking means to ~~either skip time~~ one of the first skip time and the second skip time.

Claim 34 (Currently Amended) The reproduction apparatus according to claim 25, characterized in that:

wherein a reproduction-time clocking means is further provided for clocking ~~the~~ a reproduction time from ~~the~~ a last skip-operation completion time to ~~the~~ a next skip-operation start time; ~~and, and~~

wherein, when if the next skip operation is the backward reproduction-position skip, the skip-time determining means determines, as the skip time for the one of the forward reproduction-position skip and the backward reproduction-position skip, the a time which is obtained by adding the reproduction time clocked by the reproduction-time clocking means to ~~either skip time~~ one of the first skip time and the second skip time.

Claim 35 (Cancelled)

Claim 36 (Currently Amended) A reproduction method, comprising:

a reproducing step of reading information stored in a ~~record~~ recording medium and reproducing ~~this~~ the information;

a skip-operation accepting step of arbitrarily accepting ~~either~~ one of an instruction for a forward reproduction-position skip ~~or~~ and an instruction for a backward reproduction-position skip;

a skip-time determining step of making a skip time for ~~either one~~ of the forward reproduction-position skip and the backward reproduction-position skip longer than ~~[[a]] the skip time for another of the forward reproduction-position skip and the backward reproduction-position skip~~ ~~the other~~, and determining ~~[[a]] the skip time for one of the forward reproduction-position skip and the backward reproduction-position skip~~ based on ~~either the one~~ of the instruction for the forward reproduction-position skip and the instruction for the backward reproduction-position skip ~~which is accepted in the skip-operation accepting step; and~~

a controlling step of, when one of the if either instruction for the forward reproduction-position skip or the instruction for the backward reproduction-position skip is accepted during a reproduction performed by the reproducing step, then stopping the reproduction performed by the reproducing step, moving the a reading position in, from which the reproducing step reads the information is read from the record recording medium, by the skip time determined, for the one of the forward reproduction-position skip and the backward reproduction-position skip, in the skip-time determining step, and resuming the reproduction after the moving-movement of the reading position is completed;

a forward skip-operation elapse-time clocking step of clocking an elapsed time that has elapsed since a last instruction has been accepted for the forward reproduction-position skip; and

a backward-skip deciding step of deciding whether or not the elapsed time clocked in the forward skip-operation elapse-time clocking step has exceeded a predetermined time, when the skip-operation accepting step accepts the instruction for the backward reproduction-position skip,

wherein, when the backward-skip deciding step decides that the elapsed time exceeds the predetermined time, the skip-time determining step determines a predetermined first skip time,
and

wherein, when the backward-skip deciding step decides that the elapsed time does not exceed the predetermined time, the skip-time determining step determines a second skip time that is shorter than the first skip time.

Claim 37 (Currently Amended) A non-transitory computer-readable recording-medium having-in-which a reproduction program recorded thereon-is-stored, the reproduction program causing-allowing a computer to function as:

a reproducing means for reading information stored in a ~~record~~ recording medium and reproducing ~~this~~ the information;

a skip-operation accepting means for arbitrarily accepting ~~either one of an~~ one of an instruction for a forward reproduction-position skip ~~or~~ and an instruction for a backward reproduction-position skip;

a skip-time determining means for making a skip time for ~~either one of the forward reproduction-position skip and the backward reproduction-position skip longer than~~ for one of the forward reproduction-position skip and the backward reproduction-position skip longer than ~~[[a]] the skip time for another of the forward reproduction-position skip and the backward reproduction-position skip~~ for one of the forward reproduction-position skip and the backward reproduction-position skip based on ~~either the one of the instruction for the forward reproduction-position skip and the instruction for the backward reproduction-position skip~~ one of the instruction for the forward reproduction-position skip and the instruction for the backward reproduction-position skip ~~which is accepted by the skip-operation accepting means; and~~

a controlling means for, when-if the skip-operation accepting means accepts either one of the instruction for the forward reproduction-position skip or the instruction for the backward reproduction-position skip during a reproduction-in by the reproducing means, then stopping the reproduction-in by the reproducing means, moving-the a reading position, from-in which the reproducing means reads the information from the recording-record medium, by the skip time determined, for the one of the forward reproduction-position skip and the backward reproduction-position skip, by the skip-time determining means, and resuming the reproduction after the moving-movement of the reading position is completed;

a forward skip-operation elapse-time clocking means for clocking an elapsed time that has elapsed since a last instruction has been accepted for the forward reproduction-position skip;
and

a backward-skip deciding means for deciding whether or not the elapsed time clocked by the forward skip-operation elapse-time clocking means has exceeded a predetermined time, when the skip-operation accepting means accepts the instruction for the backward reproduction-position skip,

wherein, when the backward-skip deciding means decides that the elapsed time exceeds the predetermined time, the skip-time determining means determines a predetermined first skip time, and

wherein, when the backward-skip deciding means decides that the elapsed time does not exceed the predetermined time, the skip-time determining means determines a second skip time that is shorter than the first skip time.